



**RACP**  
**Specialists. Together**  
EDUCATE ADVOCATE INNOVATE

**The Royal Australasian College of  
Physicians' Submission on the  
Zero Carbon Bill Discussion Document**

July 2018

## Introduction

The Royal Australasian College of Physicians (RACP) welcomes the opportunity to submit feedback on the Zero Carbon Bill discussion document (“the discussion document”). The RACP works across more than 40 medical specialties to educate, innovate, and advocate for excellence in health and medical care. Working with our senior members, the RACP trains the next generation of specialists, while playing a lead role in developing world best practice models of care. We also draw on the skills of our members to develop policies that promote a healthier society. By working together, our members advance the interest of our profession, our patients, and the broader community.

The RACP’s key points are that:

- The RACP supports the Zero Carbon Bill.
- The RACP is committed to reducing the impact of climate change on health
- The Bill should focus on the health benefits as well as the economic benefits of committing to a reduction in emissions
- The Bill should incorporate the principles of Te Tiriti o Waitangi and Te Ao Māori.
- Consideration should be given to health inequities that may arise from changes made to mitigate the effects of climate change.

## The Discussion Document

The Ministry for the Environment’s (MfE) proposed Zero Carbon Bill (the Bill) is intended to drive meaningful climate change action in New Zealand. It is intended to commit New Zealand to a target of net zero carbon by 2050 or sooner, set a legally binding pathway to this target, and require the Government to make a plan in relation to carbon emissions.

The discussion document seeks the public’s opinion on four key proposals. Firstly, feedback is sought on three proposed 2050 emissions reduction target options: a net zero carbon dioxide, a net zero long-lived gases and stabilised short-lived gases, and a net zero emissions target. Secondly, the discussion document seeks feedback on how New Zealand sets emission budgets. Thirdly, the Bill will establish a new Climate Change Commission (the Commission) to provide independent expert advice and to support New Zealanders to hold Governments to account towards progress.

Lastly, the MfE propose that the Bill includes several adaptation provisions to help decision-makers manage climate change risks in a systematic way. These include a national climate change risk assessment, a national adaptation plan, adaptation reporting power, and a regular review of progress towards implementing the national adaptation plan.

## Background

The health impacts of climate change are a significant global public health concern<sup>1</sup>. The World Health Organization (WHO) has identified climate change as the greatest threat to global health in the 21<sup>st</sup> century<sup>2</sup>. If left unchecked, climate change threatens to worsen food and water shortages, change the risk of climate-sensitive diseases, and increase the frequency and intensity of extreme weather events. This is likely to have serious consequences for public health and wellbeing.

---

<sup>1</sup> Haines A, Ebi KL, Smith KR, Woodward A. Health risks of climate change: act now or pay later. *The Lancet*. Vol 384. 20 September 2014.

<sup>2</sup> World Health Organization. Climate change and human health: WHO calls for urgent action to protect health from climate change: sign the call. Geneva; World Health Organization: 2018. Available from: <http://www.who.int/globalchange/global-campaign/cop21/en/>.

Anthropogenic climate change occurs primarily because of greenhouse gas (GHG) emissions from human activities<sup>3 4 5 6</sup>. Climate scientists agree that anthropogenic global warming is occurring, is accelerating, and will not stabilise or improve without significant mitigation<sup>7 8 9</sup>. Although there is uncertainty as to their projected magnitude, without immediate intervention, average global temperatures relative to the year 2000 are likely to rise by 1-2 degrees by 2050, and by 3-4 degrees by 2100<sup>10</sup>. Internationally, the health sector is also a contributor to global carbon emissions<sup>11 12</sup>.

## Impacts of climate change on health

The health impacts of climate change are a pressing global public health concern. The discussion document focuses on the economic and environmental impacts of climate change, but little is mentioned about the impacts of climate change on health. Climate change is having, and will continue to have, an effect on the health of populations. Using climate change models with conservative assumptions, the WHO estimates that, between 2030 and 20150, an extra 250,000 deaths per year globally from malnutrition, malaria, diarrhoea, and heat stress will be attributable to climate change<sup>13</sup>. Repercussions of climate change include ambient heat, air pollution, storms, floods, reduced water quality, reduced food production, increased food spoilage, and change in disease vectors. Exposure to these can lead to heat stress illness, cardiovascular disease, infectious gastrointestinal disease, physical trauma, malnutrition, psychological stress, vector-borne disease, and other epidemic illness.

## RACP Context

The RACP is part of a large and growing global network of health and medical organisations calling for action on climate change. The RACP's Climate Change and Health Working Party has developed three evidence-based position statements on Climate change and Health, Environmentally sustainable healthcare, and the Health Benefits of Mitigating Climate Change<sup>14</sup>. The RACP has coordinated an international campaign called 'Doctors for Climate Action' in which we highlighted the health impacts of climate, and called upon world leaders to commit to urgent and meaningful action to combat the threat of climate change. This work included

---

<sup>3</sup> Under current trends, the world is heading towards a global 3-4 degree Celsius temperature rise. The Royal Society of New Zealand Te Apārangi. Transition to a low-carbon economy for New Zealand. Summary Report. April 2016.

<sup>4</sup> Houghton JT, Meira LG, Callander BA, et al. (eds) 1996. Climate change 1995: The science of climate change. Cambridge: 1996. Cambridge University Press.

<sup>5</sup> United Nations 1994. United Nations Framework Convention on Climate Change.

<sup>6</sup> IPCC. Summary for Policymakers 2014. In: Field CB, Barros VR, Dokken DJ, Mach KJ, Manstrandrea MD, Bilir TE, Chatterjee M, Ebi KL, Estradea YO, Genova RC, Girma B, Kissel ES, Levy AN, MacCracken S, Manstrandrea PR, White LL eds. Climate Change 2014: Impacts, Adaptation, and Vulnerability Part A: Global and Sectoral Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.

<sup>7</sup> IPCC. Summary for policymakers 2014. In: Field CB, Barros VR, Dokken DJ, Mach KJ, Mastrandrea MD, Bilir TE, Chatterjee M, Ebi KL, Estrada YO, Genova RC, Girma B, Kissel ES, Levy AN, MacCracken S, Mastrandrea PR, White LL (eds). Climate Change 2014: Impacts, Adaptation, and Vulnerability Part A: Global and Sectoral Aspects Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge: Cambridge University Press.

<sup>8</sup> Intergovernmental Panel on Climate Change 2014. Fifth Assessment Report. Available from: <https://www.ipcc.ch/report/ar5/>.

<sup>9</sup> United Nations 2015. Framework Convention on Climate Change: Paris Agreement.

<sup>10</sup> McMichael AJ. Globalization, climate change, and human health. New England Journal of Medicine 2013; 368 (14): 1335-1343.

<sup>11</sup> Holmner A, Ebi K, Lazuardi L, Nilsson M. Carbon Footprint of Telemedicine Solutions – Unexplored opportunity for Reducing Carbon Emissions in the Health Sector. PLOS One. September 2014, vol 9, Issue 9.

<sup>12</sup> Malik A, Lenzen M, McAlister S, McGain F. The carbon footprint of Australian health care. The Lancet. Vol 2. January 2018.

<sup>13</sup> World Health Organization 2015. Climate Change and Health. Fact sheet N° 266. Available from: <http://www.who.int/mediacentre/factsheets/fs266/en/>.

<sup>14</sup> RACP website. Climate Change and Health. All statements available from: <https://www.racp.edu.au/advocacy/policy-and-advocacy-priorities/climate-change-and-health>.

a Global Consensus Statement that was endorsed by 69 health and medical organisations from around the world<sup>15</sup>. In 2015 the RACP decided to divest from all financial holdings in or directly linked to fossil fuel industries as a first step in reducing its own carbon footprint<sup>16</sup>.

The RACP is committed to:

- Raising professional awareness of the health impacts of climate change,
- Advocating for national climate change and health strategies in Australia and New Zealand, including meaningful mitigation and adaptation targets, effective governance arrangements, professional and community education, effective intergovernmental collaboration, and a strong research capacity,
- Reducing the RACP carbon footprint and improve sustainability of health services, and
- Establishing an enduring RACP climate change advocacy and engagement capability.

## RACP Position

### A. Submission Questions

#### The 2050 Target

##### 1. What process should the Government use to set a new emissions reduction target in legislation?

The RACP recommends that the Government sets the new emissions reduction target in law now, with the ability to make the target stronger in response to the Commission's early advice. The target should be based on the most up to date climate science, on our international obligations, and on principles of global equity. The RACP advocates for a decrease in all GHG emissions.

##### 2. If the Government sets a 2050 target now, which is the best target for New Zealand?

The RACP advocates for net zero emissions across all GHGs by 2040, or earlier if the Intergovernmental Panel on Climate Change's October 2018 report provides guidance that global emissions need to be reduced faster. New Zealand has three main GHGs: carbon dioxide, nitrous oxide, and methane. All three continue to damage our climate and/or oceans for hundreds of years or more<sup>17</sup>.

#### **Fossil fuels**

The RACP is in support of the reduction of fossil fuel usage and the increase of accessible public and active transport. Combustion of fossil fuels causes many health harms. Fine particle air pollution, released during fossil fuel combustion, increases the risk of cardiovascular disease and death, and may increase the risk of premature births<sup>18 19 20</sup>. Fossil fuel for transportation, particularly in urban areas, also causes air pollution and associated respiratory disease<sup>21</sup>.

---

<sup>15</sup> RACP website. Climate Change and Health. Global Consensus Statement: Act Now to Reduce the Damaging Health Impacts of Climate Change. Available at: <https://www.racp.edu.au/docs/default-source/advocacy-library/pa-dfca-global-consensus-statement.pdf?sfvrsn=12>.

<sup>16</sup> The Royal Australasian College of Physicians. Board communique May 2015. Available from <https://www.racp.edu.au/docs/default-source/default-document-library/board-communique-may-2015.pdf>.

<sup>17</sup> Zickfield K, Solomon S, Gilford DM. Centuries of thermal sea-level rise due to anthropogenic emissions of short-lived greenhouse gases. *Proc Natl Acad Sci U S A*. 2017; 114(4): 657-62. Available from: <http://pnas.org/content/pnas/early/2017/01/03/1612066114.full.pdf>.

<sup>18</sup> De Franco E, Moravec W, Xu F et al. Exposure to airborne particulate matter during pregnancy is associated with preterm birth: a population-based cohort study. *Environmental Health* 2016; 175(2): 91-98.

<sup>19</sup> Chang HH, Reich BJ, Miranda ML. Time-to-event analysis of fine particle air pollution and preterm birth: results from North Carolina, 2001-20054. *American Journal of Epidemiology* 2012; 175(2): 91-98.

<sup>20</sup> Dominici F, Peng RD, Bell ML et al. Fine particulate air pollution and hospital admission for cardiovascular and respiratory diseases. *JAMA* 2006; 295 (10): 1127-1134.

<sup>21</sup> Pan G, Zhang S, Feng Y et al. Air pollution and children's respiratory symptoms in six cities of Northern China. *Respiratory Medicine*; 104 (12): 1903-1911

The RACP calls on the New Zealand Government, on top of reducing fossil fuels usage, to increase the accessibility of public transport, particularly to inadequately serviced areas. The RACP encourages the Government to increase opportunities for safe and active transport through methods such as funding the construction of bicycle and pedestrian paths. We also encourage that public or mass transit and active transport are incorporated into the planning phase of new developments, by using environmentally and health-sensitive urban planning<sup>22</sup>. Public mass transport via rail or bus is more energy efficient than motorcycles, taxis, or cars<sup>23 24</sup>.

In addition to a reduced carbon footprint, public transport is also associated with higher levels of physical activity, as commuters make incidental journeys between transport nodes<sup>25</sup>. Increased incidental walking can assist individuals in meeting physical activity targets<sup>26</sup>, which, in turn, reduces risk factors and diseases associated with sedentary lifestyles<sup>27</sup>. Active transport like cycling and walking is associated with decreased childhood asthma, obesity, cardiovascular disease, stroke, diabetes and certain cancers, as well as mental health benefits. This is particularly the case if undertaken in a group<sup>28 29</sup>. Increasing physical activity via active transport options could help to prevent up to 3.2 million premature deaths annually worldwide<sup>30</sup>.

### ***Agriculture and food production***

As well as reducing New Zealand's GHG emissions from agriculture and food production, the RACP recommends that the Government raises awareness of plant-based diets and reducing meat consumption, and facilitate low carbon systems of food production<sup>31</sup>. Global agriculture and food production produce more than 25 per cent of all greenhouse gases, a figure likely to increase as low to middle income countries shift towards consuming more processed foods<sup>32 33 34 35</sup>. Current trends suggest that by 2050, global GHG emissions from food production and land clearing will have increased by an estimated 80 per cent<sup>36</sup>.

Greenhouse gas emissions from agriculture and food production may be reduced by moving towards plant-based diets, such as the Mediterranean and lacto-ovo-vegetarian diets<sup>37</sup>. Plant-based food production is less energy-intensive and releases fewer emissions compared to diets with high amounts of meat, particularly

---

<sup>22</sup> The RACP. The Health Benefits of Mitigating Climate Change. Position Statement. November 2016. Sydney, NSW; 2000.

<sup>23</sup> After adjusting for carrying capacity.

<sup>24</sup> Gordon C. Which transport is the fairest of them all? The Conversation, 22 April; 2014.

<sup>25</sup> Rissel C, Curac N, Greenaway M et al. Physical activity associated with public transport use – a review and modelling of potential benefits. *International Journal of Environmental Research and Public Health* 2012; 9(7): 2454-2478.

<sup>26</sup> Rissel C, Curac N, Greenaway M et al. Physical activity associated with public transport use- a review and modelling of potential benefits. *International Journal of Environmental Research and Public Health* 2012; 9(7): 2454-2478.

<sup>27</sup> Knight JA. Physical inactivity: associated diseases and disorders. *Annals of Clinical & Laboratory Science* 2012; 42(3): 320-337.

<sup>28</sup> Whitmee S, Haines A, Beyrer C et al. Safeguarding human health in the Anthropocene epoch: report of The Rockefeller Foundation – Lancet Commission on Planetary Health. *The Lancet* 2015; 386 (10007): 1973-2028.

<sup>29</sup> Tranter PJ. Speed kills: the complex links between transport, lack of time, and urban health. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 2010; 87(2): 155-166

<sup>30</sup> The Global Climate and Health Alliance (Alliance CaH) 2014. Health professionals call for climate action after UN climate change report. Press release.

<sup>31</sup> RACP. The Health Benefits of Mitigating Climate Change. Position Statement. November 2016.

<sup>32</sup> Tilman D and Clark M. Global diets link environmental sustainability and human health. *Nature* 2014; 515(7528): 518-522.

<sup>33</sup> Asfaw A. Does consumption of processed foods explain disparities in the body weight of individuals? The case of Guatemala. *Health Economics* 2011; 20(2): 184-195.

<sup>34</sup> Parry J. Pacific Islanders pay heavy price for abandoning traditional diet: replacing traditional foods with imported, processed food has contributed to the high prevalence of obesity and related health problems in the Pacific islands. *Bulletin of the World Health Organization* 2010; 88(7): 484.

<sup>35</sup> Monteiro CA, Levy RB, Claro RM et al. Increasing consumption of ultra-processed foods and likely impact on human health: evidence from Brazil. *Public Health Nutrition* 2011; 14(1): 5-13.

<sup>36</sup> Tilman D, Clark M,. Global diets link environmental sustainability and human health. *Nature* 2014; 515(7528):518-522.

<sup>37</sup> Hoffman R, Gerber M. *The Mediterranean Diet: health and science*. 2003. Chichester: Wiley.

processed meats<sup>38 39 40</sup>. Plant-based diets are also associated with reduced risk of heart disease and cancer<sup>41</sup>. Researchers have estimated that transitioning to a diet which is more plant-based<sup>43</sup> could reduce global mortality by 6-10 per cent and food-related greenhouse gas emissions by 29-70 per cent by 2050<sup>44</sup>. Similarly, reducing intake of processed foods, which require intensive energy for production, may help both GHG emissions and the risk of diseases such as diabetes or obesity<sup>45</sup>.

### 3. How should New Zealand meet its targets?

The RACP recommends that New Zealand meets its targets through domestic net emissions reductions only, including from reforestation, horticultural planting, and improved soil health. International emissions units will be volatile in price. Relying on these undermines decisive domestic investment in New Zealand. Relying on international tradeable emissions units means New Zealand misses out on opportunities for wellbeing and equity co-benefits of reducing our domestic emissions. Relying on tradeable units also means delaying the real changes for later, when they may be poorly planned and rapidly executed, with fewer co-benefits and greater likelihood for negative unintended consequences than well thought-out plans starting now. Reforestation, horticultural planting, and improved soil health (which will absorb some of New Zealand's carbon dioxide emissions), can be part of meeting our domestic net zero emissions target. But our main focus must be rapidly reducing New Zealand's GHG emissions. This includes all gases in all sectors, including the health sector.

### 4. Should the Zero Carbon Bill allow the 2050 target to be revised if circumstances change?

The RACP recommends that the target should only be altered to increase climate action ambition in response to updated scientific recommendations. There must be no renegotiating to a lower target or weakening of the set target. In the event of circumstances that suggest revision to the 2050 target, the RACP recommends that this decision is at the discretion of the Climate Change Commission, and that a transparent process including public consultation is undertaken, particularly if the Commission determines the target should be permanently revised.

## Emissions Budgets

### 5. The Government proposes that three emissions budgets of five years each (i.e. covering the next 15 years) be in place at any given time. Do you agree with this proposal?

The RACP recommends three 5-year emissions budgets covering the next 15 years, together with the "legislated net zero emissions by 2040 target". This gives the certainty needed for action and investment now. Given the urgent need for global emissions to peak by 2020, the Bill could also include the requirement for the Commission to urgently set an initial 2-year Emissions Budget<sup>46 47</sup>. This two-year Budget would fit within the first five-year Emissions Budget.

---

<sup>38</sup> Whitmee S, Haines A, Beyrer C et al. Safeguarding human health in the Anthropocene epoch: report of the Rockefeller Foundation – Lancet Commission on Planetary Health. *The Lancet* 2015; 386(10007): 1973-2028.

<sup>39</sup> Tilman D, Clark M. Global diets link environmental sustainability and human health. *Nature* 2014; 515(7528): 518-522.

<sup>40</sup> Westhoek H, Lesschen JP, Rood T et al. Food choices, health and environment: effects of cutting Europe's meat and dairy intake. *Global Environmental Change* 2014; 26: 196-205.

<sup>41</sup> Tilman D, Clark M. Global diets link environmental sustainability and human health. *Nature* 2014; 515(7528): 518-522.

<sup>42</sup> Hoffman R, Gerber M 2013. *The Mediterranean Diet: health and science*. Chichester: Wiley.

<sup>43</sup> The diet should still in accordance with standard guidelines.

<sup>44</sup> Springmann M, Godfray HCJ, Rayner M et al. Analysis and valuation of the health and climate change cobenefits of dietary change. *Proceedings of the National Academy of Sciences* 2016; 113(15): 4146-4151.

<sup>45</sup> Mozaffarian D, Hao T, Rimm EB et al. Changes in diet and lifestyle and long-term weight gain in women and men. *New England Journal of Medicine* 2011; 364(25): 2392-2404.

<sup>46</sup> Schaeffer M, Rogeli J, Roming N, Sferra F, Hare B, et al; for climate Analytics. Feasibility of limiting warming to below 1.5 ° C. 2015. Available from: [http://climateanalytics.org/files/feasibility\\_1o5c\\_2c.pdf](http://climateanalytics.org/files/feasibility_1o5c_2c.pdf).

<sup>47</sup> Hausfather Z. Mission 2020: a new global strategy to 'rapidly' reduce carbon emissions. Available from: <https://www.carbonbrief.org/mission-2020-new-global-strategy-rapidly-reduce-carbon-emissions>.



## **6. Should the Government be able to alter the last emissions budget (i.e. furthest into the future)?**

The RACP recommends that the last budget should be able to be reduced if needed to respond to emerging international evidence, or due to exceptional circumstances (decided at the discretion of the Commission). The Zero Carbon Act should also permit any Government to act so that New Zealand can emit less than budgeted.

## **7. Should the Government have the ability to review and adjust the second emissions budget within a specific range under exceptional circumstances?**

The RACP recommends that the second budget should be able to be reduced if needed to respond to emerging international evidence. The Zero Carbon Act should also permit any Government to act so NZ can emit less than budgeted.

## **8. Do you agree with the considerations we propose that the Government and the Climate Change Commission take into account when advising on and setting budgets?**

The RACP believe that the physics of climate change comes first for setting Emissions Budgets. Ecological tipping points should not be breached.

The Climate Commission's Emissions Budgets must be consistent with the best possible chance of limiting global warming to 1.5°C and the greater responsibility of well-resourced nations like New Zealand, with Budget considerations limited to:

- Scientific knowledge about climate change, sea level rise, and ocean acidification.
- Obligations under Te Tiriti o Waitangi.
- Global leadership, including international equity<sup>48</sup>.

The RACP recommends that the Commission then advises the Government on mitigation policies, including ETS settings, for the Government plans to keep NZ's future emissions within the Commission's budgets. Te Tiriti o Waitangi obligations and fairness within New Zealand should be top priorities for policy and planning. Other considerations should include substantial health co-benefits and technology relevant to climate change.

## **Government Response**

## **9. Should the Zero Carbon Bill require Governments to set out plans within a certain timeframe to achieve the emissions budgets?**

The RACP agree that the Zero Carbon Act must require the Government to respond by publishing plans to stay within budget as rapidly as feasible within a set time limit that is certainly less than 12 months.

## **10. What are the most important issues for the Government to consider in setting plans to meet budgets? For example, who do we need to work with, what else needs to be considered?**

The Government must consider Te Tiriti o Waitangi obligations and fairness within Aotearoa-New Zealand. Health equity<sup>49 50</sup> should be essential in the considerations made by Government. All regressive policies (including ETS settings) should be effectively offset for vulnerable communities. The Government should work in Te Tiriti partnership and with groups that are the most vulnerable to the changes in order to create a hopeful

---

<sup>48</sup> Metcalfe S. The New Zealand Climate and Health Council. Fast, fair climate action crucial for health and equity. Editorial. NZ Med J 2015; 128 (1425): 14-23. Available from: [http://www.nzma.org.nz/data/assets/pdf\\_file/0011/45929/Ed-Metcalfe-FINAL1425.pdf](http://www.nzma.org.nz/data/assets/pdf_file/0011/45929/Ed-Metcalfe-FINAL1425.pdf).

<sup>49</sup> Marmot M, Friel S, Bell R, Houweling TA, Taylor S. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Lancet. 2008; 372(9650): 1661-9. Available from: <http://www.sciencedirect.com/science/article/pii/S0140673608616906>.

<sup>50</sup> New Zealand College of Public Health Medicine / New Zealand Medical Association. NZCPHM Policy Statement on Health Equity (adopting the NZMA Position Statement on Health Equity 2011). Wellington: NCPHM, 2016.

and fairer future. These communities should include those already disadvantaged, living in locations vulnerable to the direct impacts of climate change, and those working in high-emissions industries. The Government should consider sustainable economic opportunities and technology relevant to climate change.

## Climate Change Commission

### **11. The Government has proposed that the Climate Change Commission advises on and monitors New Zealand's progress towards its goals. Do you agree with these functions?**

The RACP agrees in the creation of the Commission to advise on and monitor New Zealand's progress towards its goals. However, the Commission should set New Zealand's Emissions Budgets. The Commission could also advise how New Zealand stays within these budgets, how New Zealand can best adapt to climate change, and monitor progress on New Zealand's emissions reductions.

### **12. What role do you think the Climate Change Commission should have in relation to the New Zealand Emissions Trading Scheme (ETS)?**

The Commission should advise the Government on ETS policy settings so that New Zealand emits within budget. The Commission must also identify the extent of regressive impacts from proposed ETS settings, and propose effective complementary policies which fairly compensate vulnerable households and communities.

### **13. The Government has proposed that Climate Change Commissioners need to have a range of essential and desirable expertise. Do you agree with the proposed expertise?**

The climate change commissioners (the commissioners) should include people with expertise in relation to public health and health. It is also essential that the Commission is founded on partnership with tangata whenua and upholds obligations under Te Tiriti o Waitangi, including for example, the preservation of taonga species and preservation of their habitats. The RACP also proposes a larger pool of Climate Commissioners. This would allow for Commissioners to be called in according to the focus area.

The Commissioners should be sector experts, with a high standing in society. The Commissioners should have essential expertise in the areas of climate science and public health. It is essential that Commissioners have high priority essential expertise in equity issues, social change, mātauranga Māori<sup>51</sup>, Te Tiriti o Waitangi, te reo me ona tikanga Māori, and Māori interests.

It is important that vested interests are not part of the Commission, particularly those with a financial interest in maintaining the status quo, which is harmful to planetary and population health. This is to ensure that policy processes are not derailed by those who have an official stake in continuing to do harm.

## Adapting to Climate Change

### **14. Do you think the Zero Carbon Bill should cover adapting to climate change?**

The RACP recommends that the Bill should adapt to climate change. Adaptation must be a separate advisory work stream, to avoid overtaking the Commission's top priority climate mitigation role.

---

<sup>51</sup> "Mātauranga Māori" can be defined as "the knowledge, comprehension, or understanding of everything visible and invisible existing in the universe. It is often used synonymously with wisdom. In the contemporary world, the definition is usually extended to include present-day, historic, local, and traditional knowledge, systems of knowledge transfer and storage, and the goals, aspirations and issues from an indigenous perspective". Manaaki Whenua: LandCare Research. Available from: <https://www.landcareresearch.co.nz/about/sustainability/voices/matauranga-maori/what-is-matauranga-maori>.



**15. The Government has proposed a number of new functions to help us to adapt to climate change. Do you agree with the proposed functions?**

The RACP supports the following adaptation provisions (which include the health sector):

- A national climate change risk assessment
- A national climate change adaptation plan
- Regular review of progress towards implementing the national adaptation plan
- An adaptation reporting plan

Adaptation must be dealt with by a separate working group, to avoid distraction from the top priority of mitigation. A health adaptation plan must be put in place that covers health sector adaptation and health-protecting adaptation in other sectors.

**16. Should we explore setting up a targeted adaptation reporting power that could see some organisations share information on their exposure to climate change risks?**

The RACP agrees that the MfE should explore setting up a targeted adaptation reporting mechanism that could see some organisations share information on their exposure to climate change risks. A targeted adaptation reporting mechanism could start with voluntary reporting in the first year, and require compulsory reporting in subsequent years.

## **B. Other points**

### **Health Inequity**

The direct and indirect health impacts of climate change will have greater impact on those already suffering from disadvantage and poorer health in New Zealand. Climate change itself and also the impact of in the ongoing response to climate change are more likely to affect certain groups of people. This includes children, the elderly, low-income earners, Māori and Pacific populations, and people living with disabilities, or acute or chronic illness.

The financial costs of changes made to mitigate the effects of climate change may more readily affect these groups of people. The financial costs of climate change responses should be mitigated where possible and viable alternatives offered for those who will be the most affected by the changes. For instance, people with precarious work may not be able to access public transport<sup>52</sup>. The RACP supports mitigation actions but is very aware of the potential for serious further disparities increasing and inequities developing due to the inequitable distribution of resources. The RACP encourages the Government to look at innovative ways to help people to travel to work, which could include funding of company buses or provision of car pool services.

### **Te Ao Maori**

It is important that the Government adheres to Te Tiriti o Waitangi and reflects Te Ao Māori in their considerations of the Bill. As the discussion document notes, many iwi enterprises are involved in natural resource management including forestry, agriculture, and fisheries. Some Māori communities are likely to be disproportionately affected by climate change and climate change policies, because of their socio-economic characteristics and the physical location of valued infrastructure and places on the exposed and erosion-prone coast.<sup>53</sup>

The RACP believes that it is important that the Bill is prepared in consultation with iwi, Māori leadership, and Māori groups who have key investment and mana in affected resources. More work needs to be done on the effect of climate change and climate change action on Māori and the natural resources that they oversee.

---

<sup>52</sup> The Royal Australasian College of Physicians. Make it the Norm. August 2017. Available from: <https://www.racp.edu.au/fellows/resources/new-zealand-resources/new-zealand-election-statement-2017>.

<sup>53</sup> The Royal Society of New Zealand Te Apārangi. Climate change implications for New Zealand. April 2016.

## Pacific neighbours

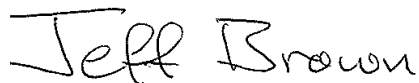
The RACP recommends that the Government demonstrates leadership in protecting health from climate change in the climate-vulnerable Pacific region<sup>54</sup>.

## Summary

- The RACP supports the Zero Carbon Bill.
- The RACP is committed to reducing the impact of climate change on health.
- The Bill should focus on the health benefits as well as the economic benefits of committing to a reduction in emissions.
- The Bill should consider the principles of Te Tiriti o Waitangi and Te Ao Māori.
- Consideration should be given to any health inequities that may arise from changes made to mitigate the effects of climate change.

The RACP thanks the Ministry for the Environment for the opportunity to provide feedback on the Zero Carbon Bill Discussion Document. To discuss this submission further, please contact the NZ Policy and Advocacy Unit at [policy@racp.org.nz](mailto:policy@racp.org.nz).

Yours sincerely



Dr Jeff Brown  
New Zealand President  
**The Royal Australasian College of Physicians**

---

<sup>54</sup> OraTaiao. Climate change and health call to action. Climate Change and Health: Health professionals joint call for action. Revised version July 2018.